Salt River Fire Department Operating Guidelines

Fireground Strategy

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PURPOSE

The following procedure outlines the fireground strategy to be employed at structure fires. Fireground operations will fall in one of two strategies, OFFENSIVE OR DEFENSIVE. The two strategies are based on a standard Risk Management Plan that is to be employed at ALL structure fires. This is the basis for this procedure.

WITHIN A STRUCTURED RISK MANAGEMENT PLAN

WE MAY RISK OUR LIVES A LOT TO PROTECT SAVABLE LIVES.

WE MAY RISK OUR LIVES A LITTLE TO PROTECT SAVABLE PROPERTY.

WE WILL NOT RISK OUR LIVES AT ALL TO SAVE WHAT IS ALREADY LOST.

Considering the level of risk, the Incident Commander will choose the proper strategy to be used at the fire scene. The strategy can change with conditions or because certain benchmarks (i.e. ALL CLEAR) are obtained. The strategic mode will be based on:

- The rescue profile (savable occupants/survivability profile)
- The building (type of construction, condition, age, etc)
- Structural integrity of the building (contents vs. structural involvement)
- The fire load (what type of fuel is burning and what's left to burn)
- The fire and/or smoke conditions (extent, location, etc.)

The Incident Commander is responsible for determining the appropriate fireground strategy. Once the appropriate strategy is initiated, it becomes the Incident Commander's job to ensure that all personnel are operating within the strategy. By controlling the fireground strategy, the Incident Commander is providing overall incident scene safety. The proper strategy will be based on the following:

- Avoiding simultaneous OFFENSIVE and DEFENSIVE strategies in the same fire area. This incorrect combination of strategies happens by first committing personnel to interior positions, then opening up on them from exterior positions with master streams. Once the two strategies have been used in this fashion, there will be no winners in the interior.

- Matching the appropriate strategy to need for rescue and the fire conditions of the structure, and minimizing risk to firefighters.

Managing fireground strategy must start with the arrival of the first unit and be constantly monitored and evaluated throughout the entire incident. The initial Incident Commander will include the fireground strategy in the on-scene report. As Command is transferred to later arriving officers, these new officers "assuming command" must evaluate the fireground strategy based on the Risk Management Plan.

Fireground strategy provides a starting point to begin fireground operations. Once the strategy is announced, all the players involved should know what to expect, as far as the position and functions of themselves and one another. The fireground strategy cannot be a mystery to anyone; everyone operating on the fireground should be operating in the same strategy mode, Offensive or Defensive.

OFFENSIVE STRATEGY

Within the framework of the Risk Management Plan, the structure must first be determined to be safe to enter. Once determined safe, an Offensive Fire Attack is centered around RESCUE. When safe to do so, the Salt River Fire Department will initiate offensive operations at the scene of structure fires. The following are guidelines for offensive fire attacks:

Initial attack efforts must be directed toward supporting a primary search -- the first attack line must go between the victims and the fire to protect avenues of rescue and escape.

Determine fire conditions and extent before starting fire operations (as far as possible). Don't operate fire streams into smoke.

Offensive fires should be fought from the INTERIOR-UNBURNED SIDE (interior capability is the principal offensive strategy factor).

Avoid exterior application of water during offensive operation. This is usually the very worst application point.

Avoid fire attack from the burning side of the building. An attack from the burning side generally will drive the fire, smoke, and heat back into the building and drive the interior fire control forces out of the building. Companies must resist the urge to focus only on the fire (this is known as the "candle moth" syndrome or "tunnel vision"). In some cases, the most effective

tactical analysis involves an evaluation of what is not burning rather than what is actually on fire. The unburned portion represents where the fire is going and should establish the framework for fire control activities and requirements.

Command must consider the most critical direction and avenues of fire extension, plus its speed, particularly as they affect:

- Level of risk to firefighters
- Rescue activities
- Confinement efforts
- Exposure protection

Command must allocate personnel and resources based upon this fire spread evaluation. Command must not lose sight of the very simple and basic fireground reality that at some point firefighters must engage and fight the fire. Command must structure whatever operations are required to PUT WATER ON THE FIRE. The rescue/fire control-extension /exposure problem is solved in the majority of cases by a fast, strong, well-placed attack. Command must establish an attack plan that overpowers the fire with ACTUAL water application, either from offensive or defensive positions.

Command must consider the 7 sides (or sectors) of the fire: front, rear, both sides, top, bottom, and interior. Fires cannot be considered under control until all 7 sides are addressed. Not doing so results in fire extension.

Where the fire involves concealed spaces (attics, ceiling areas, construction voids, etc.), it becomes paramount that companies open up and operate fire streams into such areas. Early identification and response to concealed space fires will save the building. Officers who hesitate to open up because they don't want to beat up the building may lose the structure.

Early ventilation (natural, vertical or positive pressure) is a major support item that must be addressed during concealed space attacks. This must be initiated early and be well coordinated. Ventilation openings should be made in and/or over the fire area. Positive pressure should be injected into the unburned side and exit out of the fire area.

Command must get ahead of the fire. Command must make critical decisions that relate to cutoff points and must develop a pessimistic fire control strategy. It takes a certain amount of time to

get water to a location, and the fire continues to burn while the attack is being set up. Command must consider where the fire will be when attack efforts are ready to actually go into operation; if misjudged, the fire may burn past the attack/cutoff position before resources and personnel are in position. Don't play "catch up" with a fire that is burning through a building(s) the fire will usually win all these races. Project your set-up time, write off property and get ahead of the fire. Set up adequately ahead of the fire, and then overpower it.

WRITE-OFF PROPERTY THAT IS ALREADY LOST and go on to protect exposed property, based on the most dangerous direction of fire spread. Do not continue to operate in positions that are essentially lost.

The basic variables relating to attack operations involve:

- Location/position of attack
- Size of attack
- Support functions

Command develops an effective attack through the management of these factors. Command must balance and integrate attack size and position with fire conditions, risk and resources.

Many times offensive/defensive conditions are clear-cut and Command can quickly determine the appropriate strategy. In other cases, the situation is MARGINAL and Command must initiate an offensive interior attack, while setting up defensive positions on the exterior. THE ONLY REASON TO OPERATE IN MARGINAL SITUATIONS IS RESCUE. The effect of the interior attack must be constantly evaluated, and the attack abandoned if necessary. Strategy changes can develop almost instantly or can take considerable time. Command must match the strategy with the conditions. The Incident Commander controls overall incident scene safety by determining the proper strategy to be used and providing appropriate support.

If the Incident Commander doesn't change strategies from offensive to defensive until the building is disassembling itself due to structural damage, Command is late in strategy determination and on the receiving end of the building's decision governing the new strategy to be employed. Often times when the building gets to make those decisions, firefighters become traumatized (physically and/or emotionally).

THE INCIDENT COMMANDER MUST DETERMINE THE STRATEGY, THE BUILDING SHOULDN'T.
Command should abandon marginal attacks when:

- A primary "all clear" is obtained and the situation is still marginal.
- The roof is unsafe or untenable. Especially working fires in large unsupported or lightweight trussed attic spaces.
- Interior forces encounter heavy heat and cannot locate the fire or cannot make any progress on the fire.
- Heavy smoke is being forced from the building under pressure and is increasing.

Command needs to constantly evaluate conditions while operating in a marginal strategy. This requires frequent and detailed reports from Sector Officers.

It is imperative that Command assigns a Roof Sector, as early as possible, during marginal operations for rapid evaluation of roof conditions. In certain situations Command should strongly consider not committing crews to the interior of a structure unless he/she receives a report from Roof Sector that the roof of the structure is safe to operate on and under. It is better to go from an offensive to a defensive strategy too soon rather than too late.

DEFENSIVE STRATEGY

The decision to operate in a defensive strategy indicates that the offensive attack strategy, or the potential for one, has been abandoned for reasons of personnel safety, and the involved structure has been conceded as lost (the Incident Commander made a conscious decision to write the structure off).

The announcement of a change to a defensive strategy will be made as "Emergency Traffic" and all personnel will withdraw from the structure AND MAINTAIN A SAFE DISTANCE FROM THE BUILDING.

Captains will account for their crews and advise their Sector Officer on the status of their crew. Sector Officers will notify Command of the status of the crews assigned to their sector. A PAR (Personnel Accountability Report) shall be obtained after any switch from offensive to defensive strategy.

Interior lines will be withdrawn and repositioned when changing to a defensive strategy. Crews should retreat with their hose lines, if safe to do so. If retreat is being delayed because of hose lines, and it's unsafe to stay in the building, hose lines should be abandoned.

All exposures, both immediate and anticipated, must be identified and protected.

The first priority in defensive operations is personnel safety, then exposure protection. The next priority may be to knock down the main body of fire. This may assist in protection of exposures but does not replace it as a higher priority.

Master streams are generally the most effective tactic to be employed in defensive operations. For tactical purposes, a standard master stream flow of 750 GPM should be the guideline. Adjustments may be made upward or downward from this figure but it is very significant in the initial deployment of master streams.

When the exposure is severe and water is limited, the most effective tactic is to put water on and, if need be, from the interior of the exposure.

Once exposure protection is established, attention may be directed to knocking down the main body of fire and thermal-column cooling. The same principles of large volume master stream procedures should be employed.

Fire “under control” means the forward progress of the fire has been stopped and the remaining fire can be extinguished with the on-scene resources; it does not mean the fire is completely out. When the fire is brought under control, Command will notify Alarm utilizing the standard radio report of "FIRE UNDER CONTROL." Alarm will record the time of this report. Command must initiate a PAR report from all on scene sectors and crews.

If defensive operations are conducted from the onset of the incident, Command will notify Alarm that there will not be a primary search completed for the affected structure(s).